

REMARKS

Applicants, their principal representatives in Germany, and the undersigned have carefully reviewed the first Office Action of June 30, 2005 in the subject U.S. patent application, together with the prior art cited and relied on by the Examiner in the rejection of the claims. In response, the claims of the subject application, as filed, have been amended. It is believed that the claims now pending in the subject application are patentable over the prior art cited and relied on by the Examiner. Reexamination and reconsideration of the application, and allowance of the claims is respectfully requested.

In the first Office Action of June 30, 2005, the drawings were objected to under 37 CFR 1.83(a) as failing to show every feature of the invention specified in the claims. As will be discussed in detail shortly, it is believed that the claims now pending recite features that are clearly shown in the drawings, as filed. It is believed that the amendments to the claims thus overcome the objections to the drawings.

Claims 1-7, all of the claims then pending in the application, were rejected under 35 USC 112, first paragraph. It was asserted that the claims contained subject matter that was not described in the specification in a way as to enable one of skill in the art to make and/or use the invention.

Claims 1-3, 5 and 6 have been amended. Claims 4 and 7 have been cancelled. Again, as will be discussed in detail subsequently, the claims now pending are believed to

be supported by the specification of the application. It is believed that claims 1-3, 5 and 6 overcome the rejection under 35 USC 112, first paragraph.

Claims 1-7 were also rejected under 35 USC 112, second paragraph, as being indefinite. It was asserted that the terms “rail-like” and “telescope-like” in claims 1 and 5 were indefinite. Claim 2, lines 5, 6 and 8 were also asserted as being unclear because of the use of the term “selectively”.

The claims now pending have been amended to remove the language indicated as being indefinite or unclear. It is believed that the claims now pending in the application also comply with 35 USC 112, second paragraph.

Claims 1-7 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 4,758,107 to Sakai. It was asserted that Sakai shows a device for conveying paper webs and including a roller 2 and a traction means 1 for the web. The roller includes a ring-shaped passage 21 for engagement by the traction means. The Sakai device was further asserted as comprising a guide 3, 6, and 6a for the traction means. The guide has means for releasing portions 6, 6a of the guide, allowing the portions to be pivoted away from the path of the traction means.

It is appreciated that the specification of the subject invention is lengthy, and that there are 33 drawing figures. It is believed that a brief overview of the function and structure of the overall device will be beneficial to a better understanding of the portions of the overall device to which the claims of the subject application are directed.

Referring initially to Fig. 1, a plurality of individual paper webs 05, 06, 07, or a paper web train are to be drawn into a longitudinal fold former. The draw-in operation is conducted only during start-up of the printing press of which the subject device is a part. Once the printing press is placed in a production mode, the assembly used to initially draw the plurality of webs or the web train into the device, must be removed from the path of travel of the paper web or web train. The draw-in operation is akin to the threading of leading end of a film through a projector.

One, or a plurality of traction means, such as the traction means 33, 34, 36, as seen in Fig. 1, are provided with paper web engaging means. The traction means are typically roller chains of the type which are shown in detail in Fig. 8. These roller chains have a plurality of roller wheels that are connected together by chain links. Spikes 35 are supported by these chain links. These spikes are the paper web engaging means that secure the paper webs or the web trains to the traction means during the drawing in or the feeding of the leading ends of the paper webs through the longitudinal former and ultimately to the two cooperating folding rollers 13 and 14. One path of travel of the endless, finite length traction means is shown most clearly in Fig. 3.

As can be seen again by referring to Fig. 1, in one configuration, the traction means is located above the former plate 21, over which the paper web passes as it is drawn in. In that embodiment of the invention, the draw-in means has a portion of the traction means which has no spikes. Once the web draw-in has been completed, the

spike-free portion of the traction means is retreated along the paper web path. This embodiment is not the structure of the subject invention to which the claims of the subject application are directed. That aspect was the subject of claims in a related application No 09/926,175 which is currently pending. This application is a division of application No. 09/926,176, which is now U.S. Patent No. 6,705,499, which issued on March 16, 2004. The subject application is also related to application No. 09/926,174, which issued as U.S. 6,929,710 on August 16, 2005.

Referring now to Fig. 21 of the subject application the plurality of webs, or the web train can be drawn over the hopper insertion plate 21 from the insertion roller 16 by the use of a draw-in assembly which is situated opposing the hopper insertion plate 21 instead of being supported by the hopper insertion plate 21, as is shown in Figs. 1 and 2. The traction means is finite in length and again is typically a roller chain or other similar chain that carries a plurality of spikes 35, as seen in Fig. 21. These spikes engage the paper webs and pull the webs down along the hopper insertion plate 21 until the webs on the web train are fed into the nip defined by the two cooperating folding rollers. The endless, finite length traction means is supported in a guide rail assembly that includes guides, such as the guide shown in Fig. 11, for example. The spikes 35 of the traction means are directed toward the hopper traction plate 21 and also toward the hopper insertion roller 16, as is seen in Fig. 21.

The hopper insertion roller 16 is provided with a passage in its circumference, which passage is configured to receive the spikes 35 during operation of the traction means. The structure of the hopper insertion roller 16, with its passage 235 can be seen in Fig. 33. It is to be noted that the relevant roller 16 is the one shown in the lower portion of Fig. 33. Other rollers can cooperate with the hopper insertion roller 16 that has the passage 235 which receives the spikes 35 of the finite length paper web traction means. A discussion of this roller structure is provided at paragraph 108 of the specification of the subject application.

Again referring to Fig. 21, the guide rails are part of a guide rail support 220, which is discussed at paragraph 154 of the specification. This guide rail support 220 can extend along the longitudinal center line of the folding hopper, generally at 18 and is generally perpendicular to the hopper insertion plate 21. This guide rail support 220, consisting of a plurality of the profiled strips 89, forms a closed, finite length path for the finite length traction means to follow during draw-in of the plurality of webs or the web train.

As is discussed in detail in paragraph 161, the guide rail support, with its guide rails can be placed against, and moved away from the hopper support plate 21 and the hopper insertion roller 16. As depicted in Fig. 21, this is accomplished by the provision of retractable and extendable guide rods 221, 222. These guide rods are attached, at first ends, to the guide rail support 220. At their opposite ends, they are connected with piston

rods of actuating drives 218, 219. Operation of these actuating drives will thus move the guide rail support, and its constituent guide rails toward, and away from the hopper insertion plate 21 and toward and away from the hopper insertion roller 16. During draw-in of the paper webs or the web train, the guide rail support and its associated guides, together with the traction means, with its associated spikes, is in the position depicted in Fig. 21. Once the draw-in has been completed, the guide rail support, with its guides and traction means and associated spikes, are moved so that they are no longer directly adjacent the hopper insertion roller 16 and the hopper insertion plate 21. This clears the web travel path, so that subsequent to the web draw-in, the printing press, and specifically the longitudinal fold former portion of the press, can operate in its normal manner, with no obstruction to the pull of paper web travel.

Returning now to the Office Action, it is believed that the objection to the drawings is overcome by the amendments of the claims. All of the elements of the claims, as discussed above, are shown in the drawings. No correction to the drawings is believed to be required.

The claims as currently pending are believed to comply fully with both the first and second paragraphs of 35 USC 112. The specification of the application, and specifically the portions discussed above, are believed to provide an enabling description of the claimed invention. Further, the claims, as amended, are believed to particularly

point out and to distinctly claim the subject matter which applicants believe to be the invention.

Turning now to the rejection of the claims, as being anticipated by U.S. Patent No. 4,758,107 to Sakai, the following comments are believed to be appropriate. Initially, it is to be noted that the Sakai patent is directed to a web-feed tractor for a printer, not to a web draw-in device for a web-fed printing press. While the preamble of a claim is not of patentable significance, it does set forth the environment in which the member finds use and is to be considered in determining the applicability of the prior art. The Sakai device is used to feed paper forms, with a perforated border to a printer. The endless belt has a row of feed pins 11 which are spaced at a distance that coincides with the spacing distance of the holes in the edges of the sheets to be fed to the printer. The essence of the Sakai device is to provide a device where the pins 11 on the endless belt do not slip out of alignment with the holes in the edges of the sheets being fed to the printer. This is accomplished by providing the inner surface of the endless belt with a longitudinal row of teeth 12. These teeth 12 are spaced apart from each other by alternating teeth 12 carrying guiding ribs 13, as seen in Fig. 2. The guiding ribs 13 are configured to be receivable in a central, annular guide groove 21 which is situated intermediate a pair of drive sprockets of a sprocket wheel, generally at 2. A plurality of spaced cogs 22 project outwardly from the sprocket wheel 2 and are spaced circumferentially apart at a distance which coincides with the lengths of the teeth 12. The cooperation of the teeth 12 and the cogs

22 keeps the pins 11 aligned longitudinally with the holes on the edge of the paper. The ribs 13 prevent the belt from sliding laterally on the sprocket wheel 2.

A frame, generally at 3 has a hole 31 at a front end that is used to support the sprocket wheel 2. A suitable drive shaft is used to rotate the sprocket wheel 2 while it is supported in the housing 3 at one end of housing 3, as seen in Fig. 1.

A pair of upper and lower web holding plates 6 and 6a are pivotably connected to the housing 3 by knuckle means. These knuckle means include laterally spaced upper ears 35 and lower ears 35a. The web holding plates 6, 6a are positionable on the support 3 on the opposite side of support 3 from the timing belt 1. This is evident from a careful review of Fig. 1 which shows pins 7 and ears 35 which secure the web holding plates 6, 6a to the side of housing 3 opposite from the timing belt 1.

Claim 1, as currently amended, is neither anticipated by, nor rendered obvious over the Sakai patent. Claim 1 recites a roller that is adapted to guide paper webs in a web-fed printing press. The sprocket wheel 2 of Sakai is clearly not a web guide roller. It is a drive sprocket for a cogged belt. Claim 1 recites a finite length paper web traction means with paper web engaging means and with a passage in the roller for receipt of those paper web engaging means. In Sakai, the paper web engaging means are the feed pins 11. Those feed pins are on the opposite face of the belt 1 from the guide groove 21 in the periphery of the sprocket wheel 2. The structure is not the same, and the use is very different. A guide for the traction means is recited in currently amended claim 1,

together with a guide support. There is no corresponding, or similar structure in the Sakai device. Claim 1 further recites means for supporting the guide support for movement with respect to the roller to move the guide adjacent the roller, with respect to the roller, Again, Sakai does not show, or suggest a similar structure. Accordingly, it is believed that the subject invention, as recited as currently amended claim 1, is patentable over Sakai.

Claims 2, 3, 5 and 6 have been amended to conform their language to that of currently amended claim 1 and to overcome the rejections under 35 USC 112, second paragraph. Since these claims depend from believed allowable, currently amended claim 1, they are also believed to be allowable.

The various additional references cited and discussed generally in the Office Action, but not applied against the claims, have been reviewed. Since they were not relied on, no discussion thereof is believed to be necessary.

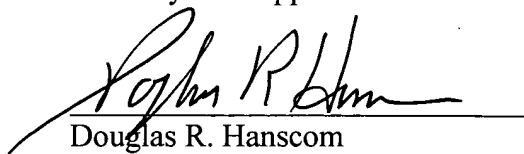
SUMMARY

Claims 1, 2, 3, 5 and 6 have been amended. Claims 4 and 7 have been cancelled. It is believed that the claims now pending in the subject application are fully supported by the specification, are shown in the drawings, and are definite. It is further believed that these claims are patentable over the prior art cited and relied on. Allowance of the claims and passage of the application to issue is respectfully submitted.

Respectfully submitted,

Wolfgang Günter RUCKMANN
Horst Bernhard MICHALIK
Applicants

JONES, TULLAR & COOPER, P.C.
Attorneys for Applicants



Douglas R. Hanscom
Reg. No. 26, 600

September 29, 2005
JONES, TULLAR & COOPER, P.C.
P.O. Box 2266 Eads Station
Arlington, Virginia 22202
(703) 415-1500
Attorney Docket W1.2280US